

REMARKS

Claims 1-13, 22-37, 39 and 40 are pending. The Examiner rejected these claims under 35 U.S.C. § 103(a) as being unpatentable over United States Patent Number 5,403,604 ("Black"), in view of United States Patent Nos. 4,643,902 ("Lawhon"), 4,522,836 ("Dechow") and 4,439,458 ("Puri").

According to the Examiner, Black discloses using nanofiltration (NF) membrane to divert initial juice flow to produce a high and low sugar containing juice fraction. The Examiner also states Dechow and Puri generally disclose that it is known to treat juices with ion-exchange. The Examiner also contends Lawhon discloses passing ultrafiltration (UF) permeates and reverse osmosis (RO) retentates, rather than the entire juice, through an ion exchange column. Thus, according to the Examiner, it would have been obvious to one having ordinary skill in the art to treat juice streams with ion exchanger in lieu of NF (as disclosed by Black). These rejections are respectfully traversed.

Dechow and Puri simply disclose treating juices with ion-exchange. Dechow and Puri, either alone or in combination, do not disclose or suggest Applicants' claimed invention. Black discloses treating juice streams with UF. Black does not disclose or suggest treating with ion exchange while keeping the temperature of the juice at or below 45° F, as claimed in Applicants' invention. Hence, Black, either alone or in combination with Dechow and/or Puri, does not disclose Applicants' claimed invention.

In response to Applicants' arguments filed August 5, 2004, the Examiner acknowledged that Applicants are arguing Lawhon does not use a portion of **initial (normal-acid) juice having suspended solids** to combine with the reduced-acid portion but rather Lawhon uses **normal-acid RO retentate devoid of solids**. The Examiner contended that she did see how Applicants' claimed invention excludes the use of normal-acid RO retentates.

All independent claims of the invention (i.e. claims 1, 22, 33, 34 and 35) require adding an initial single strength juice stream (normal-acid) **having suspended solids** to

deacidified juice. Thus, Applicants' claimed invention excludes the use of normal-acid RO retentates that are **devoid of suspended solids**.


Lawhon discloses mixing reduced-acid RO retentate in different ratios with normal-acid RO retentate for use in juice reconstitution. See Lawhon, column 11, lines 14-17. Lawhon further discloses using an ion exchange column for reducing acidity of normal-acid RO retentate. According to Lawhon, the normal-acid RO retentate passing through the exchange column **is highly concentrated, containing virtually no pulp or suspended solids to plug the ion exchange column**. See Lawhon column 3, lines 28-30 and column 6, lines 19-32.

Lawhon does not teach or suggest the use of normal-acid RO retentate having suspended solids. Lawhon discloses an advantage of using normal-acid RO retentate devoid of solids is only a minor fraction of it has to be passed through the ion exchange column. See Lawhon, column 6, lines 19-32. Hence, Lawhon actually teaches away from the use of normal-acid RO retentate having suspended solids. As a result, one skilled in the art, after reading Lawhon, would have had no motivation to modify Lawhon's normal-acid RO retentate devoid of solids with normal-acid RO retentate having suspended solids for fear of plugging the ion exchange column. Therefore, Lawhon, either alone or in combination with Black, Puri and Dechow, does not disclose Applicants' claimed invention.

CONCLUSION

For the foregoing reasons, all of the claims are allowable and Applicants respectfully request an early indication of allowance of claims 1-13, 22-37, 39 and 40.

Respectfully submitted,

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